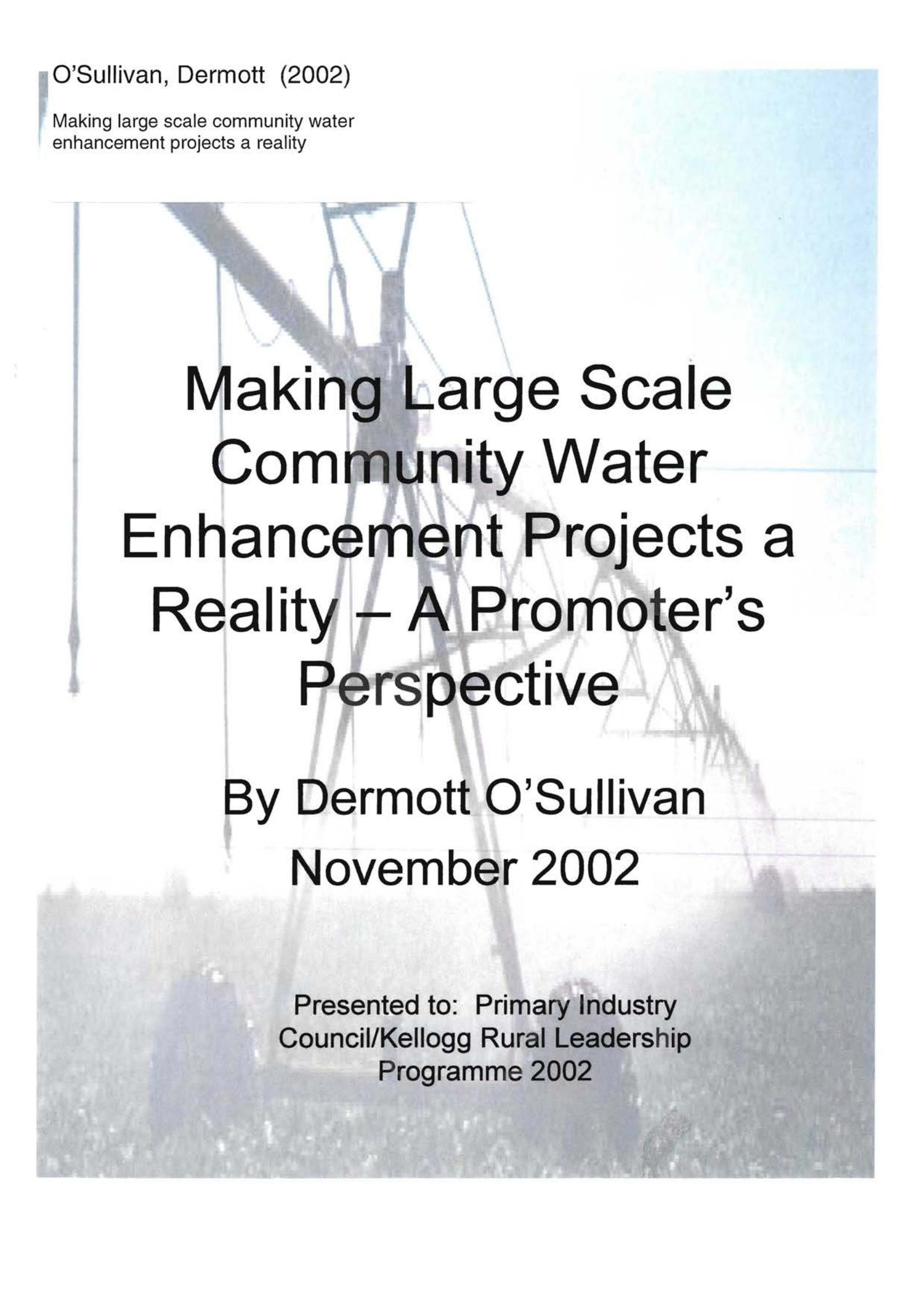


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Making large scale community water  
enhancement projects a reality



# Making Large Scale Community Water Enhancement Projects a Reality – A Promoter's Perspective

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## Table of Contents

<b>1.0 Executive Summary .....</b>	<b>2</b>
<b>2.0 What is a “Large Scale Community Water Enhancement Project?.....</b>	<b>5</b>
<b>3.0 Findings of Canterbury Regional Water Study Findings .....</b>	<b>8</b>
<b>4.0 Some History of Irrigation Development in New Zealand.....</b>	<b>9</b>
<b>5.0 The Opuha Dam Experience .....</b>	<b>12</b>
<b>6.0 Formation of Farmers Irrigation Management Group – FIG .....</b>	<b>14</b>
<b>7.0 Other Problems.....</b>	<b>15</b>
<b>8.0 Resource Consent Issue .....</b>	<b>15</b>
<b>9.0 Recreational and Environmental Benefits.....</b>	<b>15</b>
<b>10.0 Opuha – Catalyst for further Development .....</b>	<b>16</b>
<b>11.0 What’s Being Done Different.....</b>	<b>17</b>
<b>12.0 What Drives the Promoter’s .....</b>	<b>20</b>
<b>13.0 References.....</b>	<b>21</b>

## **1.0 Executive Summary**

This report has been written to convey the experiences that I have enjoyed and the lessons I have learned in eight years involvement in large scale community water enhancement project promotions.

### **1.1 History**

Such development has an 80 year history in N.Z. Schemes were built in the early 1930's, but, with no technology, farmers really only used irrigation to combat drought.

Then from 1930-50 development became more of an engineering feat by Government with poor intake by farmers.

From then through to the 1980's the focus was on getting farmer buy-in at an early stage, and various acts were passed and amended to accommodate farmers' involvement and needs. Generally it was a period of strong Government assistance and subsidisation.

In the early 80's with the major government reforms, promoters' of irrigation were left on their own with government assistance totally withdrawn. This period saw development ease until the mid 90's when the first two true community water enhancement schemes were built. They were the 11,000 Waimakariri and the Opuha Dam Scheme, the latter of which I have been involved as a director of the irrigation company since 1994.

### **1.2 Present Situation**

Interest in the community water enhancement projects is currently at a new high. This has been brought about principally by the Government, through the Hon. Jim Suttons's Contestable Water Studies Grant, and the Sustainable Farming Fund, putting close to \$4 million over the last three years into subsidising scheme feasibility studies.

There are some 10 major projects involving between 300- 400,000 ha, currently under various stages of investigation.

Such development potentially would have a major impact on the nations economy, constituting in the order of \$2 billion/yr to G.D.P. – an increase of 1.6%, most of which is in form of export income.

This is, without doubt, one of the reasons why there appears to be a recent urgency that has evolved within both central and local government to see large scale water enhancement projects proceed – something that has not been apparent for twenty year.

### **1.3 Canterbury Regional Water Supply**

The recently released study highlights the problems we face in Canterbury. It suggests that future water abstraction could double from 290-569cm<sup>3</sup>/sec.

It also concludes, however, that the Canterbury alpine rivers can supply such demand, as well as meeting in stream flow requirements, if harnessed into storage for re-distribution across resource zones.

### **1.4 The Opuha Dam Experience**

This report gives a full outline of the physical and financial structure of this scheme, the tradeable water shares which were a first with this scheme, and the problems we had in attaining farmer up-take and how that was dealt with.

### **1.5 Catalyst for Further Development**

Now that Opuha is fully subscribed, farmers are looking for more water. The Aoraki Water Trust was established 2 years ago, of which I am Deputy Chairman. We are looking at the feasibility of bringing water from Lake Tekapo by gravity over Burkes Pass and distributing into five river catchments. It is proposed to bring 15cm/sec which will supply 30,000 ha (mean flow requirements over 12 months =6cm =1.7% of Waitaki mean flow). 250 farmers signed up 32,000ha and paid \$3/ha contribution to a feasibility study which has just been completed. It concludes a totally viable scheme can be built. Water access is our challenge, however, as Tekapo water goes through six of Meridian Energy's power stations in the Waitaki system, it is now coming down to Government decision whether it wants regional development or power generation. We, as promoters', are confident in our position, but getting Government to make such a precedent setting decision will require major lobbying.

### **1.6 Making Use of Lessons Learned**

The lessons learnt from Opuha are being put to full use in dealing with the Aoraki scheme. This report gives a good outline of these.

## **1.7 What Drives the Promoters?**

Champions of a scheme will usually have some personal gain with its development – i.e. be able to irrigate their own property. They will however, be looking at the bigger picture of the growth its development will create in the community, socially, economically and environmentally and the vibrancy that the region will begin to enjoy.

Working with a group of such likeminded and enthusiastic people can give a lot of satisfaction. They know that an efficient and sustainable community irrigation scheme is a huge legacy to leave for future generations. It is, therefore, a privilege to be drivers of such development.

***2.0 What is a “Large Scale Community Water Enhancement Project? It is usually initiated by a community of interest to meet objections unrealisable by individual initiatives.***

- They are located in areas where water enhancement is required, and designed to improve the availability of water for a variety of purposes, but principally for irrigation development.
- Associated objectives often include improvements in the long term security of water supplies for urban communities, and an improvement in natural environmental flows or in exploiting environmental enhancement opportunities.
- Such projects normally involve substantial infrastructure development requiring investments beyond the capacity of the community members to finance without access to third party debt or equity capital.

The project scale will be an interest to a range of stakeholders, including local and central Government, environmental interests at the local and national levels and to the local economic communities affected.

**2.1 What is the Current Level of Interest in These Projects?**

At the present time there are some 10 individual proposals for large scale water developments that are at various stages of investigation. These are located in areas from Otago in the south to Waiarapa in the north.

The total area of irrigated land involved is between 300 – 400,000 ha. This compares with a current irrigated area of 500,000 ha. The largest single proposal involved an area of up to 80,000 ha.

The capital requirements involved in the off-farm infrastructure provision is in excess of \$2000 million.

The associated investments for on farm developments are estimated to be another \$1500 million.

The results of economic and financial studies of these projects have shown the investments to be positive so long as the funding needed, can be arranged satisfactorily.

The high level of interest from the farming community and the advanced stage reached in developing the current range of proposals, together with the number of additional proposals in the pipeline, shows clearly that the issues need to be addressed – the reality is that the current interest is unlikely to disappear.

## **2. 2 What does Such Development Mean to New Zealand Economy?**

It is estimated that the current range of new irrigation proposals would contribute in the order of \$2000 million to G.D.P. per annum, under conservative land use and market assumptions.

This represents an annual increase of 1.6 % in G.D.P, most of which is in the form of export income.

Long term, international studies predict a world food shortage as populations increase and land and water resources reach limits of development – demand for high quality food exports will inevitably increase.

New Zealand is as well placed to adopt modern efficient and sustainable irrigated agriculture as any nation. N.Z. has natural advantages of climate, soils, drainage and water resources. The N.Z. skill base in agricultural operations of high tech farming is internationally recognised.

Many leaders from the agricultural sector argue that a strong part of a national development strategy should be to build on what N.Z does well – produce market acceptable export agricultural products – as well as pursue the knowledge agendas. Proactive development of irrigated agriculture may be a one key component for realising new agricultural export opportunities and it has strong user support.

### **2.3 Some of the Particular Issues Involved in These Large Scale Developments That Make Them Different.**

Large scale water enhancement projects possess the following characteristics:

- They require significant up front capital.
- They are long-term – with appropriate maintenance, they will successfully operate over periods that cover a number of generations of the community they service
- They have a restricted direct-user market
- They generally supply a single service – water enhancement
- They are a catalyst for significant land use and social changes
- They require access to private land for associated infrastructure

The Resource Consent process presents formidable hurdles for water enhancement projects, because of the scale of developments. There is recent experience that suggests that the securing resource consents to USE water will become a bigger issue than a resource consent to TAKE in dealing with water enhancement projects. Regional Councils have little experience in dealing with developments that relate to large areas of irrigated land.

There is a major challenge in dealing with the large number of potential water users and to find the resources to undertake awareness raising and education to ensure that informed discussions can be made – especially as these decisions are likely to involve substantial changes in business operations and lifestyle.

### **3.0 Findings of Canterbury Regional Water Study Findings**

A study has recently been completed of the water resource situation in Canterbury, being jointly promoted and funded by MAF, ECAN, and MFE.

#### **Some of the notable findings of that study were:**

- The current peak weekly allocation of water for abstraction is 290m<sup>3</sup>/sec. The future water scenario indicates that this could approximately double to 569m<sup>3</sup>/sec.
- Of the future potential peak demand, 89% is expected to be for irrigation, 5% for stock water, 3% for municipal supplies, 2% industrial, 1% plantation forestry.
- The Waitaki and Rakaia rivers provide 48% of the regions measured average surface runoff. When combined with the other major alpine rivers (Waimakariri, Waiau, Rangitata, Hururini and Clarence), these large rivers contribute 88% of regions runoff. During periods of low flow the main alpine rivers provide an even greater proportion of Canterbury's surface water resources.
- Due to poor reliability of supply from run-of-river sources, there is likely to be minimal new irrigation sourced directly from surface water.
- **The region has enough water to meet foreseeable reasonable water demands including in-stream flow requirements. However, the water is not always in the right place at the right time. Large areas of Canterbury do not have ready access to a reliable water source. Balancing water supply and demand in the long term will require a significant amount of storage in the foothills, and redistribution of water across resource zones.**
- The establishment of an agency with a mandate to plan the long term development of the regions water resources is required. The local and regional communities will be required to make decisions to ensure water is fairly and equitably distributed amongst stakeholders to allow development and wise use for the long term benefit of the regional community.

## **4.0 Some History of Irrigation Development in New Zealand**

Communal irrigation scheme development has been happening in N.Z for 80 years. During that period there has been a major change from full development by Government through to the present where new schemes are stand alone commercial operations with little Government assistance at all.

The lessons learnt on how to successfully implement a scheme are seen as an important resource for present irrigation scheme developers.

### **Pre 1930**

Twelve schemes totalling 25,200 ha were developed and financed by Government in this period. Farmers at the time knew little of irrigation technology and their approach to farming systems meant intake and use of water was limited to drought protection strategies.

### **1930 – 1950**

The 1928 Public Works Act empowered the Government to build an irrigation scheme without a vote by landowners and to take the land required for a scheme if needed. The focus of the schemes was more as an engineering project and did not provide for the wide ranging changes that had to be made by farmers. This failure to provide for farmers needs and expectations meant that on farm irrigation development was completed very slowly and therefore was under utilisation of the resource for many years. However, five schemes totalling 72,500 ha were developed mainly in mid Canterbury, accessing water from the newly developed Rangitata diversion race canal.

### **1950-80**

Major changes occurred in the mid 1950's in the approach to communal irrigation development. This was due to slow uptake and utilisation by farmers and in the increasing annual costs of early scheme operation with an unwillingness of farmers to pay additional costs.

It became clear that schemes needed prior commitment by farmers and that all beneficiaries should contribute to the cost of development of the schemes.

This meant that farmers had to be involved and fully informed of expected financial responsibilities in the future and the possible benefits that they would gain from irrigation. This brought about the active involvement of farmers in the promotion and implementation of schemes. It also brought about the provision of advice and research on irrigation practices and farm management benefits.

In 1960, an amendment in the Public Works Act was made. This required a poll with a 60% vote in favour by farmers to proceed, the farmers having to commit to uptake water and accept the appropriate water charges. Five schemes were developed with an area of 29,450 ha under this regime.

In 1967, the Water and Soil Conservation Act transferred the role of communal irrigation scheme development from the Ministry of Works to the National Soil and Water Conservation Authority. Subsequent to the instigation of this Act, there was a review of national irrigation policy in 1970. This recommended (amongst other things) County Councils and Catchment Board Authorities would be delegated the rights of promotion of irrigation schemes.

Amendments to the Act in 1975 made changes that included the requirement for:

- Prior public notification of an investigation of an irrigation scheme
- Cost sharing of capital cost between the government and farmers
- Specified 16 procedural steps for development of a scheme
- Financial assistance to farmers for on-farm costs

The latter was in recognition of the substantial level of on-farm costs required for irrigation development. It also recognised the need to accelerate benefits of irrigation development and did so by providing low interest and suspensory loans to farmers for on-farm development. The 1975 changes also increased the requirement for full engineering, economic and financial reporting of the scheme to the potential farmers involved.

Under this regime, 10 schemes were developed with a total of 33,850 ha.

### **1980-present**

Government economic reforms undertaken at this time saw very little communal irrigation development.

These reforms included:

- The removal of all subsidies and concessionary loans to farmers and the sale of the Rural Banking and Finance Corporation

- Withdrawal of central government as a funder of community irrigation scheme development
- Local body reform in both District Council and Catchment Authority level seeing the establishment of wider regional councils with responsibility over resource management.

The implementation of the Resource Management Act in 1991 has had a major impact on such development, requiring a balanced approach to the issue of water resource allocation including a consents process which gave a much greater involvement and influence on the process from other stakeholders with a wider interest in resource use other than those primarily proposing its use for irrigation.

While these major changes virtually halted communal irrigation scheme development, two schemes were built in the mid to late 90's in a private rather than public capacity. These were the 11000 ha Waimakariri Scheme and 16000 ha Opihi augmentation scheme in South Canterbury – The Opuha Dam Scheme.

In 1998 with a change to a Labour Government, and the appointment of Hon. Jim Sutton as Minister of Agriculture, there was a recognition by him of a growing interest in water enhancement projects for irrigation in the summer dry areas of both Islands. A need for seeding finance to help initiate investigations was recognised.

To help facilitate these investigations and feasibility studies, government jointly with Agmardt established a Contestable Water Studies Fund.

Since that fund has been established along with some additional funding from Sustainable Farming Funds, \$6 million dollars has been spent on approximately 45 projects, \$2 million coming from the pockets of farmers and the balance of \$4 million from those Govt. sources.

Now that many of the feasibility studies are complete, central government through the Ministry for Economic Development has assisted in funding a five part study looking at ways of assisting large scale water enhancement initiatives to become reality.

Study 1 - Review of International Models and Experiences.

Study 2 - Review of Equity Investment Options

Study 3 - Role of Central Government

Study 4 - Role of Local Government

Study 5 - Socio-economic Issues related to Previous Irrigation Investments

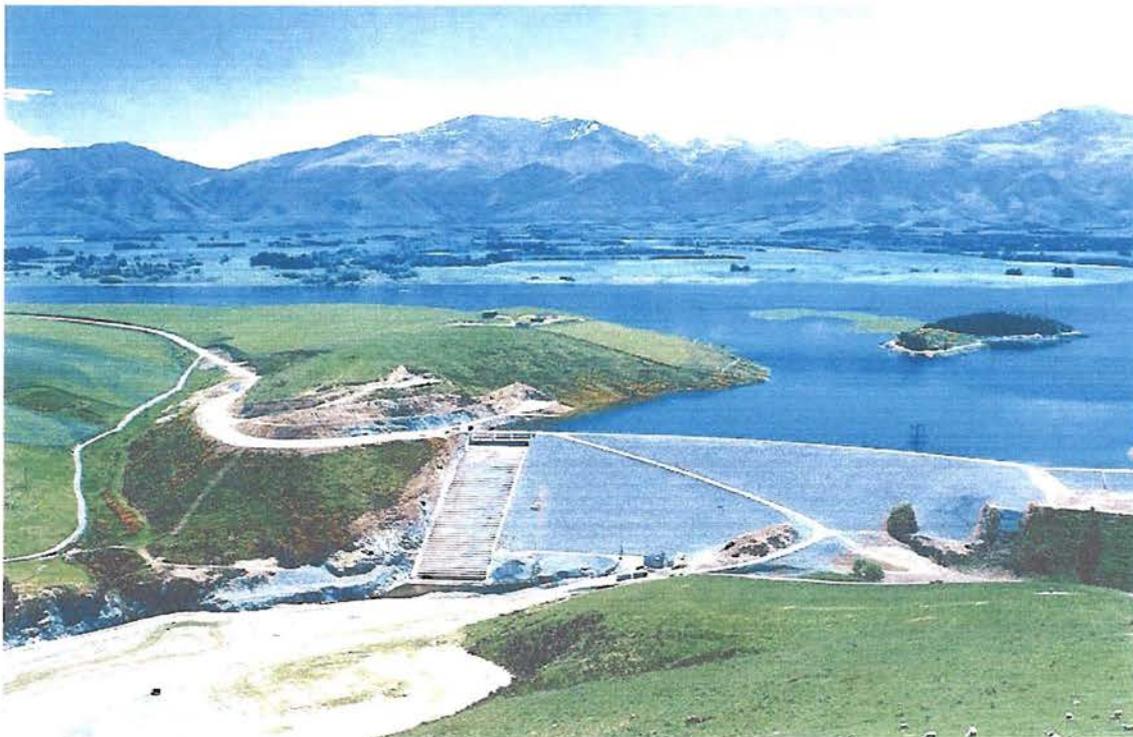
While the findings of these studies are currently out in draft form, there is still debate over study 3 “Role of Central Government”. It appears that while central government

wants development to proceed, it does not want to be seen to be directly involved. One suggestion that Minister Sutton has been heard to expound is that Government could possibly act as guarantor in picking up unsold shares if a scheme was totally viable, to allow it to be built to full capacity. This concept has considerable merit, as if viable a scheme will soon become fully subscribed on completion when the water starts flowing, and therefore should always be built to full capacity for that reason.

## **Conclusion**

**There has been a recent urgency that has evolved within both central and local government to see large scale water enhancement projects proceed – something that has not been apparent for twenty years.**

### ***5.0 The Opuha Dam Experience***



Many lessons have been learnt from the development of this scheme which will be useful to those wishing to carry out communal irrigation development in the present environment.

The project was some 15 years in its evolution.

Physical characteristics - 20 metre height working range  
720 ha surface when full  
Irrigates 16,000 ha, 98% reliability

#### Financial Structure:

<b>Total cost</b>		<b>\$32 million</b>	
Bank Finance		\$16 million	
Alpine Energy		\$7.5 million	
Government		\$1 million	
Opuha Water Part.		\$7.5 million	

During negotiations prior to resource consent hearings it became obvious that to get the support of environmental groups, considerable storage had to be provided so flows in the Opihi river system could be augmented to their satisfaction.

The outcome of the consent dictated that almost half the storage of the dam was needed to provide these flows and hence the hydrology of the catchment was such that, after providing these flows, the water available for irrigation was limited to an area of 16000 ha.

It was calculated that the cost of this storage to provide the required minimum flows was \$9 million. The question was how do we get anyone to pay for the environmental share. The National Govt of the day was approached as it was thought reasonable to expect it to come up with a third of the \$9 million - \$3 million. After considerable negotiation and lobbying a grant of \$1 million -GST inclusive- was made. **This is a clear example of what the Govt. attitude towards irrigation schemes was in the mid nineties.**

#### 5.1 Tradeable Water Shares

The Opuha Scheme broke new ground in offering tradeable water shares. An incorporated society was established to run the irrigation, South Canterbury Farmers Irrigation Society, S.C.F.I.S. Because an incorporated society can have a maximum of 4000 shares, one share represented 4 irrigable hectares. The initial capital cost of shares was set at \$250/share (\$62.50/ha). The share price was kept low because quick uptake was needed and it was realised that in the mid nineties, farmers did not have a lot of cash in the bank.

Shares traded at par value until a year after irrigation water had been flowing and farmers started to realise the benefits of the scheme. They have crept up in value as supply diminished and demand increased to the present day where they are trading at a value of approximately \$2500 (ten times par value) and there is a waiting list.

## **5.2 Why was the uptake slow?**

Irrigation was relatively new to South Canterbury and farmers didn't really know what they were letting themselves in for.

As previous schemes were being developed, MAF consultants moved in to the area 2–3 years in advance giving free advice on the investment required and the changes of farming practice that would need to be adopted. As well, the Rural Bank and Finance Corp were in the area promoting low interest irrigation development loans and the Ministry of Works involved with engineering and design. That had all gone with the change in Govt policy and the Opuha promoters had underestimated the gap that that had created.

S.C.F.I.S. directors were battling with antagonism and negativity from farmers in some areas and although 11000ha were sold reasonably easy, it became hard work from then on.

## **6.0 Formation of Farmers Irrigation Management Group – FIG**

It became obvious that an independent farmer's friend body needed to be established to deal with this situation. In 1998 the "Farmers Irrigation Group", FIG, was formed. Well known Mid Canterbury consultants, Bob Engelbrecht and Andy MacFarlane along with farmer, Bob Simpson who acted as co-ordinator, became the team. A funding drive was put in place by a board of trustees and close to \$500,000 was raised over a two year period to fund the work of this group. Contributors included Agmardt, MFE Tech NZ and Alpine Energy.

The group excelled working with mainly groups of farmers sorting out their problems and giving them the confidence to proceed, until such time as SCFIS became fully subscribed. **The independence of this group showed through as one of its biggest attributes.**

## **7.0 Other Problems**

Many farmers under subscribed for shares with some buying as low as 4-5 (16-20 ha). It was a case of many just putting their “toe in the water” to be seen to be supporting the scheme but not being sure whether they wanted to irrigate or not. Promoters could see this happening but found it difficult to overcome, because of the lack of understanding and general ignorance of how the scheme worked by some farmers. Much rationalisation has since taken place with shareholder numbers dropping from 170 to present day 120.

## **8.0 Resource Consent Issue**

Resource consenting became another nightmare for some. Although consent was granted to build the dam and store the water, individual consents then had to be obtained by shareholders to take the water from rivers and races. This has been a long protracted and expensive exercise, with many hearings having to be called and one looking like it may still have to go to the environment court to get settlement.

## **9.0 Recreational and Environmental Benefits**

Lake Opuha has become a major recreational venue. Negativity was widespread in the local community right up until the day it was opened. Within a month of this, however, attitudes changed and parking was at premium at the main picnic spots on the lakefront.

Central South Island Fish and Game Council had released thousands of juvenile trout once the lake was full so fishing has become popular, particularly for families, with contests being a regularly event. Lake Opuha also became the place to go for pleasure boating and water skiing with it being so easily accessible and its relatively warm water. Boat ownership within the locality has increased considerably. The questions within the community were often heard, however, what are “they” going to do about extra picnic spots or toilet facilities. **It was never really understood that farmers had in the main built the lake for storage for irrigation with minimal (3%) funding forthcoming for environmental/recreational interests. The question still remains how do you get these interests to pay for what they expect and in some cases demand.**

With the increased augmented flows in the Opihi river system, major improvements as a fishery have evolved. Individually, fishermen and other recreationalists have commented very positively about the improvement that has occurred, but to get such groups to come out publicly and admit to that, they seem to have some difficulty with.

### **10.0 Opuha – Catalyst for further Development**



*This dairying example has created huge interest within area. Lake Opuha in the background.*

With the irrigation shareholding now fully subscribed, to allow a maximum of 16000 ha and with the examples of the benefits of what can be done with water, farmers have been asking how can we get more water?

Two years ago, a group of six farmers pulled together and formed a new incorporated society, Aoraki Water Trust. Its mission was to complete a feasibility study of accessing water from Lake Tekapo, racing by gravity over Burkes Pass and distributing by gravity race system potentially into five river catchments from Opuha in the north to Otaio in the south. Farmer meetings were held some 18 months ago with them asked to contribute \$5/irrigable hectare towards the feasibility study. 32000ha were signed up and an initial advance of \$3/ha paid up front. The maximum Contestable Water Studies Grant of \$2000,000 was secured from Agmardt and the Sustainable Farming Fund.

The feasibility study has been completed proving a very practical and economic scheme can be developed. The biggest hurdle for this scheme is access to the water which Meridian Energy uses to go through their generators down the Waitaki system. At the end of the day it appears the Government will have to make a decision whether it wants power generation or regional development. The promoters remain relatively confident that the latter will win out as there appears to be a new found recognition as to what a scheme of this magnitude produces to both the local and national economy.

The subscribing farmers are now being approached to contribute up to \$25/irrigable hectare, \$20 to fund the Resource consent process and \$5 to fund a professional public relations and government lobbying process. Indications are that farmer support will continue to be strong.

The Aoraki Scheme will flow through parts of three district council zones with approximately 10,000 ha in each – i.e. Timaru, Waimate, and MacKenzie districts. Each of these to date has come up with \$50,000. These funds have been used to finance the efforts of a working party set up to negotiate with Meridian Energy under a Memorandum of Understanding signed with that company in May this year. While results of negotiations held under the agreement are of limited value, it is all part of the process that had to be undertaken, come resource consent hearing time.

With the three councils coming out with equal support the influence that the three Mayors will have jointly publicly supporting the project can not be underestimated when lobbying Government.

**It is believed that the strength of current community support would not have been there, if the benefits of the Opuha Scheme had not have been experienced.**

## ***11.0 What's Being Done Different***

The lessons learned from Opuha are being taken full advantage of in developing the Aoraki project.

### **1. Project must be driven by farmers**

To expect full and continued farmer support it is important that a farmer only board be seen to be champions fronting the project. With Opuha, while it had strong farmer support on the Board, two Timaru businessmen were seen as the main-men, one an accountant and one a lawyer. To those closely involved it is commonly known that the project would have failed on a number of occasions had it not been for their professional expertise and financial backing. To the average farmer/shareholder,

however, there appeared to be an apprehension that why would these men be involved if they were not going to make a financial gain – in other words farmers were going to be “ripped off”. Again, to those closely involved nothing could be further from the truth, but that was the perception held by some which unfortunately cast doubt on boards overall integrity.

With Aoraki, a board of six prominent well respected farmers with a geographic spread through the region have been pulled together and is working very well. There is power to co-opt when and where necessary and this is where professionals can be pulled in as required.

As well as a strong board, strong backup support is essential with professional secretarial services, a project manager with professional background to secure funding, manage contracts, meet deadlines and fulfil funders’ reporting requirements. Engineering services with major irrigation scheme development experience is also a huge advantage.

## **2. Don’t Allow “Them” and “Us” mentality to develop.**

Stakeholders must always be made aware that the success of a community scheme is dependent on everyone pulling together, working through the issues and overcoming problems that may arise – there will always be plenty of them. Often, at the early farmer meetings, questions will be asked what are “they” going to do about a particular issue. The question should be quickly answered that the “they” are not going to do anything, - it is what “we” are going to do about it that matters.

The Aoraki Scheme has some 13 sub schemes, individual areas supplied by separate races, or rivers. Getting farmers to take ownership of their own sub-scheme at an early stage is paramount. It is often surprising the leadership shown in these groups, sometimes by people you would least expect to come forward.

When it comes to land access for race lines etc, groups of farmers can often work through the issues with more success, than if it is left to hierarchy of the scheme promoters. There seems to be a perception that if the “big boys” are sent to negotiate, they have an open cheque book and if it comes to compensation, the expectation is a lot higher than that able to be negotiated by the local farmers.

In some cases there will be a stalemate reached. The ability of pull in an independent negotiator to handle these situations is essential. The FIG team has done some excellent work in solving some of these problems.

### **3. Controlling Media Release**

One of the major advantages the Aoraki Water Trust has enjoyed to date has been the ability to keep media releases on its proposal to an absolute minimum. This may seem strange, but has been brought about because of the sensitivity in dealing with the Meridian Energy and a confidentiality clause under the M.O.U. with them.

It has given the trust the ability to discuss and consult on a regular basis with all stakeholders that are affected or have an interest. These includes all farmers through whose properties the major races will run, farmers who bound rivers which will have a larger flow when the scheme is operating, all environmental groups, including Ngai Tahu, Fish and Game, Salmon anglers, DOC, and Forest and Bird. A consultant has been employed to work with these environmental groups and many of the issues raised initially have been worked through to the point where they are, in the main, supportive of the project.

Nothing gets backs up more, or sends affected parties into their corners ready to come out fighting, than reading in the media of something that is going to affect them and they haven't been fully consulted. Meetings have been held with the local media reporter who has been most co-operative. A major media release is planned in the near future when the consultation process is complete and the Aoraki Board is satisfied that reactions from as many quarters as possible will be all positive.

### **4. Provision for Education**

Much effort has gone into putting funding in place so as the FIG team are able to deliver their assistance to farmers in their major decision making process. A grant from the Sustainable Farming Fund has been secured which will fund 50% of the cost of up to 120 meetings with farmer groups. Substantial sponsorship is also being sought from some of the major rural corporates to enable up to 50% subsidy of one on one farmer consultation for those that require it.

The importance of a group like FIG providing this service independent of the scheme promoters should not be underestimated. It certainly worked in sorting Opuha's problems out, so for Aoraki the service will be available from the outset, which should minimise problems arising.

## **5. Weather Patterns Affect Farmer Interest**

Farmers are renown for having very short memories when it comes to weather, Don't expect to get strong support in a wet year – a fall of 25-50mm of rain in a dry year will reduce interest considerably until the nor-westers start again.

## **6. Don't take "NO" for an answer**

There will always be a number of stakeholders who will be, by varying degrees, adversely affected by new scheme proposals. "No" can never be accepted as an answer but the issues must continue to be debated and negotiated through until there is a positive solution.

### ***12.0 What Drives the Promoter's***

It is never difficult to pull together a band of like minded farmers to drive a new proposal so long as they can see viability in it. Involvement at such a level is without doubt, a major commitment and will involve hundreds of hours of voluntary time that does not come without cost.

Apart from the belief of what such a proposal will do for their own property, champions of a scheme will be looking at the bigger picture, of the growth it will create in the community, socially, economically and environmentally and the vibrancy that the community will begin to enjoy.

The experiences of working with a group of enthusiastic, like minded people and the professionals they employ, all with a strong will to succeed can give a lot of satisfaction. Such satisfaction reaches new heights on scheme completion.

An efficient and sustainable community irrigation scheme is a huge legacy to leave for future generations. It is a privilege to be a driver of such a development.

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